Application No.: 09/886,534 Docket No.: 2729-133

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

1. (currently amended) A compact air conditioner for automobiles, comprising:

an evaporator positioned on an upstream side of an interior flow passage of the air conditioner;

- a heater core positioned on a downstream side of said interior flow passage;
- a defrost vent selectively opened and closed by a defrost door, and positioned in a mixing chamber that is situated in an exit of said interior flow passage;
  - a face vent opened and closed by a face door;
- a first partition positioned between said evaporator and said heater core, and provided with a first blowing opening for allowing air to bypass said heater core and a second blowing opening for blowing air to said heater core;
- a floor vent <u>divided</u> <u>separated</u> by a second partition <u>from</u> <u>positioned behind</u> said heater core, and selectively opened and closed by a floor door;
- a temperature regulating door for regulating degrees of opening of said blowing openings, said temperature regulating door being movably supported by walls of a housing of said air conditioner;
- a heater chamber containing said heater core, said heater chamber being defined by said first and second partitions and a pair of side partitions, said heater chamber being open at a bottom thereof and communicating with said second blowing opening; and
  - a pair of side blowing passages each being formed between one of said side partitions and



an interior wall of said housing of said air conditioner.

- 2. (original) The compact air conditioner according to claim 1, further comprising a heater core inserting hole, said heater core inserting hole being formed on a front wall of said air conditioner housing at a position under said evaporator so as to allow said heater core to be removably inserted into said heater chamber.
- 3. (original) The compact air conditioner according to claim 2, wherein said refrigerant supply and return conduits are connected to said heater core through said heater core inserting hole.
- 4. (previously presented) The compact air conditioner according to claim 3, wherein said heater core is horizontally disposed in said heater chamber:
- 5. (previously presented) The compact air conditioner according to claim 2, wherein said heater core is horizontally disposed in said heater chamber.
- 6. (previously presented) The compact air conditioner according to claim 1, wherein

said first partition is arcuate, said temperature regulating door being arcuate and having a curvature corresponding to that of said first partition; and

said temperature regulating door is rotatably supported by the walls of said housing so that the degrees of opening of said first and second blowing openings are selectively regulated according to an angle of rotation of said temperature regulating door.

7. **(currently amended)** An air conditioner, comprising: a housing containing first, second and third chambers;



Docket No.: 2729-133

a first heat exchanger located in the first chamber, wherein the first chamber is configured to pass a first air flow through the first heat exchanger in a first direction;

a second heat exchanger located in the second chamber, wherein the second chamber is configured to pass a second air flow through the second heat exchanger in a second direction substantially perpendicular to the first direction, the third chamber being configured to receive the heat exchanged air from at least one of the first and second chambers and to discharge the heat-exchanged air from the third chamber air conditioner;

a partition member having first and second openings, wherein the partition member, together with walls of said housing, defines the first, second and third chambers, the first opening is configured to allow fluid communication between the first chamber and the third chamber, and the second opening is configured to allow fluid communication between the first chamber and the second chamber; and

a pair of <u>side blowing</u> passages configured to allow fluid communication between the second chamber and the third chamber.



- 8. (original) The air conditioner of claim 7, wherein the partition member has an arcuately curved surface.
- 9. **(currently amended)** The air conditioner of claim 7, further comprising a door configured to adjust the degree degrees of opening of the first and second openings.
- 10. (original) The air conditioner of claim 9, wherein the door has an arcuately curved surface corresponding to the curved surface of the partition member.
  - 11. (canceled)
  - 12. (currently amended) The air conditioner of claim 7, wherein the second chamber

defines a hole adapted to connect to the second heat exchanger from [[an]] outside the air conditioner.

- 13. (original) The air conditioner of claim 12, further comprising a conduit connected to the second heat exchanger through the hole.
- 14. **(new)** The air conditioner of claim 7, wherein said side blowing passages extend along opposite sides of said second heat exchanger in a third direction substantially opposite to the second direction, whereby the heat exchanged air having passed through said second heat exchanger in the second direction is led in the third direction to said third chamber.
  - 15. (new) An air conditioner, comprising:
  - a housing containing first, second and third chambers;
- a first heat exchanger located in the first chamber, wherein the first chamber is configured to pass a first air flow through the first heat exchanger in a first direction;
- a second heat exchanger located in the second chamber, wherein the second chamber is configured to pass a second air flow through the second heat exchanger in a second direction, the third chamber being configured to receive the heat exchanged air from at least one of the first and second chambers and to discharge the heat-exchanged air from the air conditioner;
- a partition member having first and second openings, wherein the partition member, together with walls of said housing, defines the first, second and third chambers, the first opening is configured to allow fluid communication between the first chamber and the third chamber, and the second opening is configured to allow fluid communication between the first chamber and the second chamber;
- at least one passage configured to allow fluid communication between the second chamber and the third chamber; and
  - a door for adjusting degrees of opening of both said first and second openings, said door



being slidable along a portion of said partition member between a first position in which said door completely closes said first opening and opens said second opening, a second position in which said door completely closes said second opening and opens said first opening, and at least one intermediate position in which said door partially opens both said first and second openings.

Docket No.: 2729-133

- 16. (new) The air conditioner of claim 16, wherein said door describes a first circular curve.
- 17. **(new)** The air conditioner of claim 16, wherein said portion of said partition member describes a second circular curve having a radius approximate to that of said door.
- said door describes a first circular curve;
  said portion of said partition member describes a second circular curve; and
  said door is rotatably supported by walls of said housing so as to describe a third circular
  curve when said door rotates, a radius of said third circular curve being substantially equal to that of
  said first circular curve, and said second and third circular curves being substantially concentric.

(new) The air conditioner of claim 15, wherein

- 19. **(new)** The air conditioner of claim 18, wherein said at least one passage comprises two side blowing passages which extend along opposite sides of said second heat exchanger in a third direction substantially opposite to the second direction, whereby the heat exchanged air having passed through said second heat exchanger in the second direction is led in the third direction to
- 20. **(new)** The air conditioner of claim 19, wherein said second direction is substantially perpendicular to the first direction.



18.

said third chamber.